



Memorandum

To: Ohio Mathematics Chairs/Leads and Education Department Chairs

CC: Provost and Chief Academic Officers

From: Dr. Ricardo Moena
Faculty/Lead, Ohio Transfer Module Mathematics, Statistics, and Logic
Review Panel/ Subgroup 2 of the Ohio Mathematics Initiative Chairs/Leads
Network

Date: January 24, 2020

Subject: Request for Your Institutional Endorsement for the Proposed Learning
Outcomes for Ohio Transfer Module Mathematics in Elementary Education I
(TMM021) and Mathematics in Elementary Education II (TMM022)

Background

The Ohio Transfer Module (OTM) Subgroup 2, Mathematics, Statistics, and Logic, have been tasked with exploring Mathematics in Elementary Education courses essential for mathematics teachers. This effort is rooted in the fact that teachers of mathematics need to understand the underlying mathematics they are teaching, why various procedures work, how each idea they will be teaching connects with other important ideas in mathematics, and how these ideas develop and become sophisticated. Knowing only mathematics of the elementary grades is not sufficient to be an effective teacher of elementary grade mathematics.

The proposed Mathematics in Elementary Education I (TMM021) learning outcomes are based on college level mathematics. TMM021 is recommended to be activity based and serve the following purposes:

- Act as preparation for the kinds of mathematics and mathematical experiences essential for mathematical learning and professional development.
- Serve as a pre-requisite for Mathematics in Elementary Education II (TMM022)
- Act as a course integrating reasoning, flexibility, multiple explanations, and number sense. The successful student will understand numbers; operations; algebraic thinking; and number theory.

Mathematics in Elementary Education II (TMM022) learning outcomes are also based on college level mathematics, and TMM022 is recommended to be activity based. TMM022 serves the following purpose:

- Act as a course integrating reasoning, flexibility, multiple explanations, and number sense. The successful student will understand ratios, proportional relationships, and functions; measurement; geometry; and statistics and probability.

Mathematics in Elementary Education I (TMM021) and Mathematics in Elementary Education II (TMM022) can serve as stand-alone courses within the OTM or account as a two-course sequence combining learning outcomes in TMM021 (Mathematics in Elementary Education I) and TMM022 (Mathematics in Elementary Education II) into Mathematics in Elementary Education I and Mathematics Elementary Education II Sequence (TMM023).

What We Need From You

Subgroup 2 seeks endorsement of the proposed learning outcomes for TMM021 and TMM022. Please review proposed learning outcomes and coordinate efforts within your institution (both the mathematics and education departments) to complete the endorsement survey to determine if your institution agrees or disagrees with proposed course learning outcomes. We are collecting only one response per institution.

Please provide your institutional response by **Monday, February 24, 2020**. The survey link is: <https://www.surveymonkey.com/r/6765ZX7>

Important Note: Institutions must complete the survey via the link provided above. The attached PDF file is for reference only. Do not use the PDF version to respond to the survey.

Thank you in advance for your assistance. If you have any questions, contact Jessi Spencer Director of OATN Policy, Budget, and Constituent Relations, as 614-728-4706 or jspencer@highered.ohio.gov.

Attachments (3)